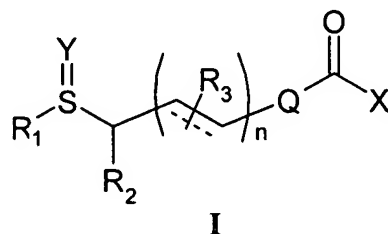


**In the Claims:**

The current status of all claims is listed below and supercedes all previous lists of claims.

Please cancel claim 30 without prejudice to its presentation in another application, amend claims 1, 4-7, 20, 24, 29, and 31-33, and add new claims 34-40 as follows:

1. (currently amended) A compound of general formula (I):



in which:

$R^1$  may be ( $C_6$  or  $C_{10}$ ) aryl, ( $C_6$  or  $C_{10}$ ) arylalkyl, ( $C_6$  or  $C_{10}$ ) heteroaryl, ( $C_3$ - $C_8$ ) heterocycloalkenyl, ( $C_5$ - $C_8$ ) cycloalkene ring, ( $C_5$ - $C_8$ ) cycloalkyl, ( $C_5$ - $C_8$ ) heterocycloalkyl or a combination thereof to form a linked or fused ring system, the cyclic moiety being optionally substituted with ( $C_1$ - $C_{10}$ ) alkyl, ( $C_1$ - $C_{10}$ ) alkenyl, ( $C_1$ - $C_{10}$ ) alkynyl, ( $C_1$ - $C_{10}$ ) alkoxy, ( $C_1$ - $C_{10}$ ) thioalkoxy, hydroxyl, hydroxyl, ( $C_1$ - $C_{10}$ ) hydroxylalkyl, halo, ( $C_1$ - $C_{10}$ ) haloalkyl, amino, amido, ( $C_1$ - $C_{10}$ ) alkylamino, ( $C_1$ - $C_{10}$ ) alkylcarbonyloxy, ( $C_1$ - $C_{10}$ ) alkoxycarbonyl, ( $C_1$ - $C_{10}$ ) alkylcarbonyl, ( $C_1$ - $C_{10}$ ) alkylthiocarbonyl, ( $C_1$ - $C_{10}$ ) alkylsulfonylamino, aminosulfonyl, ( $C_1$ - $C_{10}$ ) alkylsulfinyl, or ( $C_1$ - $C_{10}$ ) alkylsulfonyl,

$R^2$  and  $R^3$  may each independently be hydrogen, ( $C_1$ - $C_{12}$ ) alkyl, substituted ( $C_1$ - $C_{12}$ ) alkyl, or unsaturated ( $C_1$ - $C_{12}$ ) comprising one or more  $C=C$  bond or  $C\equiv C$  bond, ( $C_6$  or  $C_{10}$ ) aryl or ( $C_6$  or  $C_{10}$ ) heteroaryl, or a combination thereof to form a linked or fused ring system, or ( $C_1$ - $C_{10}$ ) alkyl, ( $C_1$ - $C_{10}$ ) alkenyl, ( $C_1$ - $C_{10}$ ) alkynyl, ( $C_1$ - $C_{10}$ ) alkoxy, ( $C_1$ - $C_{10}$ ) thioalkoxy, hydroxyl, hydroxyl, ( $C_1$ - $C_{10}$ ) hydroxylalkyl, halo, ( $C_1$ - $C_{10}$ ) haloalkyl, cyano, nitro, amino, amido, ( $C_1$ - $C_{10}$ ) alkylamino, ( $C_1$ - $C_{10}$ ) alkylcarbonyloxy, ( $C_1$ - $C_{10}$ ) alkoxycarbonyl, ( $C_1$ - $C_{10}$ ) alkylcarbonyl, ( $C_1$ - $C_{10}$ ) alkylthiocarbonyl, ( $C_1$ - $C_{10}$ ) alkylsulfonylamino, aminosulfonyl, ( $C_1$ - $C_{10}$ ) alkylsulfinyl, or ( $C_1$ - $C_{10}$ ) alkylsulfonyl, in which the saturated or an unsaturated hydrocarbon chain is optionally

interrupted by O, S, NR, CO, C(NR), N(R)SO<sub>2</sub>, SO<sub>2</sub>N(R), N(R)C(O)O, OC(O)N(R), N(R)C(O)N(R), OC(O), C(O)O, OSO<sub>2</sub>, SO<sub>2</sub>O, or OC(O)O, where R may be independently hydrogen, (C<sub>1</sub>-C<sub>10</sub>) alkyl, (C<sub>1</sub>-C<sub>10</sub>) alkenyl, (C<sub>1</sub>-C<sub>10</sub>) alkynyl, (C<sub>1</sub>-C<sub>10</sub>) alkoxy, (C<sub>1</sub>-C<sub>10</sub>) hydroxylalkyl, hydroxyl, (C<sub>1</sub>-C<sub>10</sub>) halolalkyl, where each of the saturated or unsaturated hydrocarbon chains may be optionally substituted with (C<sub>1</sub>-C<sub>10</sub>) alkyl, (C<sub>1</sub>-C<sub>10</sub>) alkenyl, (C<sub>1</sub>-C<sub>10</sub>) alkynyl, (C<sub>1</sub>-C<sub>10</sub>) alkoxy, hydroxyl, hydroxyl, (C<sub>1</sub>-C<sub>10</sub>) hydroxylalkyl, halo, (C<sub>1</sub>-C<sub>10</sub>) haloalkyl, amino, (C<sub>1</sub>-C<sub>10</sub>) alkylcarbonyloxy, (C<sub>1</sub>-C<sub>10</sub>) alkoxy carbonyl, (C<sub>1</sub>-C<sub>10</sub>) alkylcarbonyl, (C<sub>1</sub>-C<sub>10</sub>) alkylsulfonylamino, aminosulfonyl, or (C<sub>1</sub>-C<sub>10</sub>) alkylsulfonyl,

or R<sup>2</sup> and R<sup>3</sup> optionally form a (C<sub>6</sub> or C<sub>10</sub>) aryl, (C<sub>6</sub> or C<sub>10</sub>) arylalkyl, (C<sub>6</sub> or C<sub>10</sub>) heteroaryl, (C<sub>3</sub>-C<sub>8</sub>) heterocycloalkenyl, (C<sub>5</sub>-C<sub>8</sub>) cycloalkene ring, (C<sub>5</sub>-C<sub>8</sub>) cycloalkyl, (C<sub>5</sub>-C<sub>8</sub>) heterocycloalkyl linked or fused ring system, optionally containing up to 3 heteroatoms, e.g. oxygen, nitrogen, sulphur or phosphorous.

or R<sup>1</sup> and R<sup>2</sup> optionally form a (C<sub>6</sub> or C<sub>10</sub>) aryl, (C<sub>6</sub> or C<sub>10</sub>) arylalkyl, (C<sub>6</sub> or C<sub>10</sub>) heteroaryl, (C<sub>3</sub>-C<sub>8</sub>) heterocycloalkenyl, (C<sub>5</sub>-C<sub>8</sub>) cycloalkene ring, (C<sub>5</sub>-C<sub>8</sub>) cycloalkyl, (C<sub>5</sub>-C<sub>8</sub>) heterocycloalkyl linked or fused ring system, optionally the ring formed may be further substituted with a group R<sup>1</sup> as defined above, or the ring formed may be fused to a further C<sub>6</sub> aryl group which may be optionally substituted with a group R<sup>1</sup> as defined above, or a group R<sup>1</sup>R<sup>2</sup>N, with R<sup>1</sup> and R<sup>2</sup> as defined above,

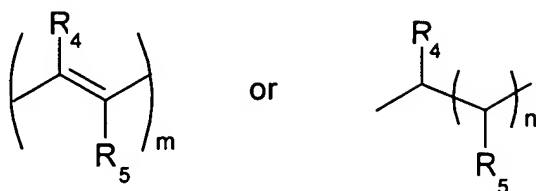
n may be equal to 0, 1 or 2,

X may be hydroxyl (-OH), -OR, NHR, hydroxamate (-NHOH), NHOR, NROR, NRNHR, or SR

where each group R may independently be hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl or substituted C<sub>1</sub>-C<sub>6</sub> alkyl, and

Y may be 0, 1 or 2 oxygen atoms, or NR where R may be H, OH, OR or a carbon atom, where R may be C<sub>1</sub>-C<sub>6</sub> alkyl or substituted C<sub>1</sub>-C<sub>6</sub> ~~alkyl~~ alkyl; and

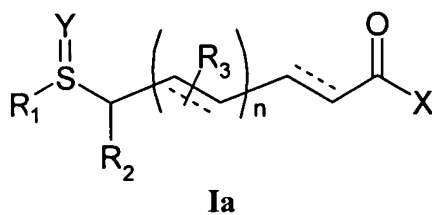
Q represents



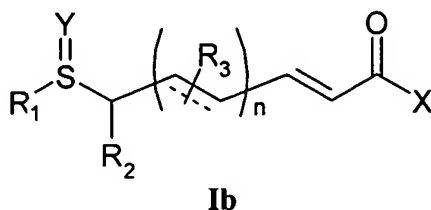
wherein m is an integer from 1 to 4; n is an integer from 1 to 8; and  $R^4$  and  $R^5$  each independently represents hydrogen, unsubstituted or substituted  $C_1$ - $C_{10}$  alkyl, an unsaturated hydrocarbon chain of up to ten carbon atoms comprising one or more carbon-carbon double bonds,  $C_6$  or  $C_{10}$  aryl, a 5- to 10-membered heterocyclic group,  $C_1$ - $C_{10}$  alkoxy,  $C_1$ - $C_{10}$  thioalkoxy, hydroxyl, halo, cyano, nitro, amino, amido, ( $C_1$ - $C_{10}$  alkyl)carbonyloxy, ( $C_1$ - $C_{10}$  alkoxy)carbonyl, ( $C_1$ - $C_{10}$  alkyl)carbonyl, ( $C_1$ - $C_{10}$  alkyl)thiocarbonyl, ( $C_1$ - $C_{10}$  alkyl)sulfonylamino, aminosulfonyl,  $C_1$ - $C_{10}$  alkylsulfinyl,  $C_1$ - $C_{10}$  alkylsulfonyl, or a saturated or unsaturated  $C_3$ - $C_{12}$  hydrocarbon chain interrupted by O, S, NR, CO, C(NR), N(R)SO<sub>2</sub>, SO<sub>2</sub>N(R), N(R)C(O)O, OC(O)N(R), N(R)C(O)N(R), OC(O), C(O)O, OSO<sub>2</sub>, SO<sub>2</sub>O or OC(O)O where R is as defined above and the saturated or unsaturated hydrocarbon chain is optionally substituted as defined above;

or a pharmaceutically acceptable salt thereof.

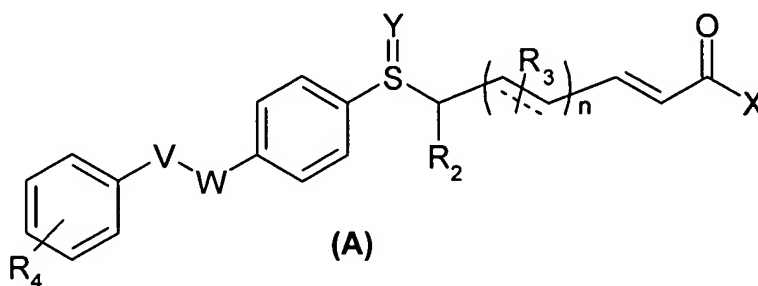
2. (original) A compound as claimed in claim 1, in which the compounds are of general formula (I) have the formula (Ia)



3. (original) A compound as claimed in claim 1, in which the compounds are of general formula (Ib)



4. (currently amended) A compound of claim 1, in which the ~~compounds are~~ compound is of general formula (A)



in which V and W are as follows:

a single carbon-carbon bond,

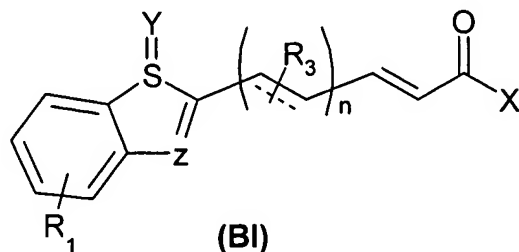
V is CR and W is N, saturated or unsaturated

V is N and W is CR, saturated or unsaturated

a linkage of the form VW or WV = RRC-O or ~~RRC-S~~ RRC-S,

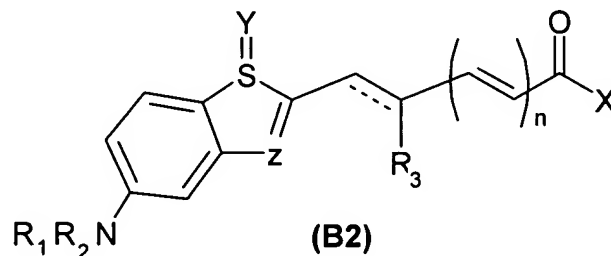
wherein V and/or W may be optionally substituted (C<sub>1</sub>-C<sub>6</sub>) alkyl, C<sub>6</sub> aryl or heterocycle, and in which each group R is independently defined.

5. (currently amended) A compound of claim 1, in which the ~~compounds are~~ compound is of general formula (B1)



in which n is equal to zero, one or two, and Z is a two-atom linkage of varying combinations of atoms of C, O, N, S, SO, SO<sub>2</sub>, and in which each group R is independently ~~defined~~ defined.

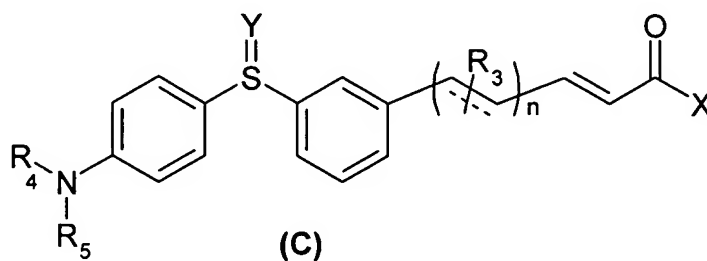
6. (currently amended) A compound of claim 1, in which the ~~compounds are~~ compound is of general formula (B2)



in which n is equal to zero, one or two, Y is no atom present, O or O<sub>2</sub> or NR and Z = CR or N; or

in which n is equal to zero, one or two and X = NHOH, OH, NROR, CRROH; and Z is a one atom linkage of N or C, or a two-atom linkage of varying combinations of atoms of C, O, N, S, SO, SO<sub>2</sub>, and in which each group R is independently ~~defined~~ defined.

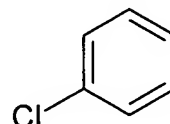
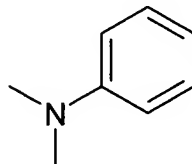
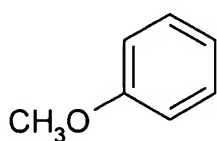
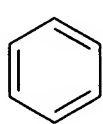
7. (currently amended) A compound of claim 1, in which the ~~compounds are~~ compound is of general formula (C)



in which Y is equal to no atom, O or O<sub>2</sub> or NR and n is equal to zero, one or two and X is equal to NHOH, OH, NROR, CRROH, and in which each group R is independently defined.

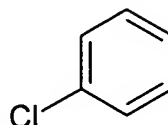
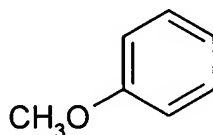
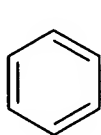
8. (original) A compound as claimed in claim 1, in which R<sup>2</sup> and R<sup>3</sup> are both Hydrogen.

9. (original) A compound as claimed in claim 1, in which  $R^2$  is methyl ( $CH_3$ ) and  $R^3$  is Hydrogen.
10. (original) A compound as claimed in claim 1, in which  $R^2$  is Hydrogen and  $R^3$  is methyl ( $CH_3$ ).
11. (original) A compound as claimed in claim 1, in which  $R^2$  and  $R^3$  are both methyl ( $CH_3$ ).
12. (original) A compound as claimed in claim 1, in which  $R^1$  is ( $C_6$  or  $C_{10}$ ) aryl, optionally substituted by halo, ( $C_1$ - $C_{10}$ ) alkoxy, or by ( $C_1$ - $C_{10}$ ) alkylamino.
13. (original) A compound as claimed in claim 1, in which X is  $-OH$ ,  $-OC_2H_5$ ,  $-OCH_3$ , or  $NHOH$ .
14. (original) A compound as claimed in claim 1, in which Y is represented by one or two oxygen atoms.
15. (original) A compound as claimed in claim 1, in which  $R^2$  and  $R^3$  are both Hydrogen (H), Y is equal to zero oxygen atoms, and n is equal to 1,  $R^1$  is one of



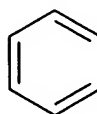
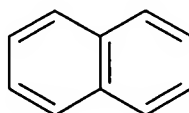
and X is one of  $-OH$ ,  $-OCH_3$ ,  $-OC_2H_5$  or  $NHOH$ .

16. (original) A compound as claimed in claim 1, in which  $R^2$  and  $R^3$  are both Hydrogen (H), Y is equal to one oxygen atom, and n is equal to 1,  $R^1$  is one of



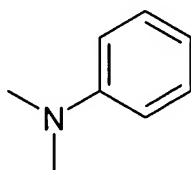
and X is one of -OH, -CH<sub>3</sub>, -OC<sub>2</sub>H<sub>5</sub> or NHOH.

17. (original) A compound as claimed in claim 1, in which  $R^2$  and  $R^3$  are both Hydrogen (H), Y is equal to two oxygen atoms and n is equal to 1,  $R^1$  is one of



and X is one of -OH, -CH<sub>3</sub>, -OC<sub>2</sub>H<sub>5</sub> or NHOH.

18. (original) A compound as claimed in claim 1, in which  $R^2$  and  $R^3$  are both methyl (CH<sub>3</sub>), Y is equal to zero oxygen atoms, and n is equal to zero,  $R^1$  is



and X may be -OCH<sub>3</sub>, -OC<sub>2</sub>H<sub>5</sub> or -OH.

19. (original) A compound as claimed in claim 1 which is:

6-Phenylsulfanyl-hexa-2,4-dienoic acid (6a)

6-(4-Chloro-phenylsulfanyl)-hexa-2,4-dienoic acid methyl ester (6b)

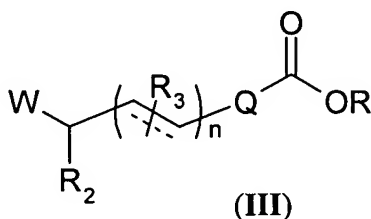
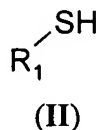
6-Phenylsulfanyl-hexa-2,4-dienoic acid methyl ester (6c)

6-(4-Dimethylamino-phenylsulfanyl)-hexa-2,4-dienoic acid methyl ester (6d)

6-(4-Methoxy-phenylsulfanyl)-hexa-2,4-dienoic acid methyl ester (6e)  
6-(4-Chloro-phenylsulfanyl)-hexa-2,4-dienoic acid hydroxyamide (7b)  
6-(4-Dimethylamino-phenylsulfanyl)-hexa-2,4-dienoic acid hydroxyamide (7c)  
6-Phenylsulfinyl-hexa-2,4-dienoic acid methyl ester (8a)  
6-(4-Chloro-benzenesulfinyl)-hexa-2,4-dienoic acid methyl ester (8b)  
6-(4-Methoxy-benzenesulfinyl)-hexa-2,4-dienoic acid methyl ester (8c)  
6-Benzenesulfinyl-hexa-2,4-dienoic acid (8d)  
6-(4-Chloro-benzenesulfinyl)-hexa-2,4-dienoic acid hydroxyamide (9a)  
6-(4-Methoxy-benzenesulfinyl)-hexa-2,4-dienoic acid hydroxyamide (9b)  
6-Benzenesulfonyl-hexa-2,4-dienoic acid (10a)  
6-Benzenesulfonyl-hexa-2,4-dienoic acid methyl ester (10b)  
6-Benzenesulfonyl-hexa-2,4-dienoic acid hydroxyamide (11a)  
6-(Naphthalen-2-ylsulfanyl)-hexa-2,4-dienoic acid methyl ester (13b)  
6-(Naphthalen-2-ylsulfanyl)-hexa-2,4-dienoic acid hydroxyamide (14a)  
4-(4-Dimethylamino-phenylsulfanyl)-2-methyl-pent-2-enoic acid methyl ester (21b)  
6-(4-Dimethylamino-phenylsulfanyl)-4-methyl-hepta-2,4-dienoic acid ethyl ester (24c)  
6-(4-Dimethylamino-phenylsulfanyl)-4-methyl-hepta-2,4-dienoic acid hydroxyamide (25c)  
6-(4-Chloro-phenylsulfanyl)-hexanoic acid methyl ester (28b)  
7-(4-Chloro-phenylsulfanyl)-heptanoic acid ethyl ester (28c)  
6-(4-Amino-phenylsulfanyl)-hexanoic acid methyl ester (28d)  
6-(4-Dimethylamino-phenylsulfanyl)-hexanoic acid methyl ester (28e)  
6-(4-((4-Chlorobenzyl)-methylamino)-phenylsulfanyl)-hexanoic acid methyl ester (28f)  
6-(4-(4-Chlorobenzenesulfonylamino)-phenylsulfanyl)-hexanoic acid methyl ester (28g)  
6-(4-Bromo-phenylsulfanyl)-hexanoic acid methyl ester (28h)  
6-(4'-Chloro-biphenyl-4-ylsulfanyl)-hexanoic acid methyl ester (28i)  
6-(4-Chloro-phenylsulfanyl)-hexanoic acid hydroxyamide (29b)  
6-(4-Dimethylamino-phenylsulfanyl)-hexanoic acid hydroxamide (29c)  
6-(4-(4-Chlorobenzenesulfonylamino)-phenylsulfanyl)-hexanoic acid hydroxamide (29g)  
6-(4'-Chloro-biphenyl-4-ylsulfanyl)-hexanoic acid hydroxamide (29i)

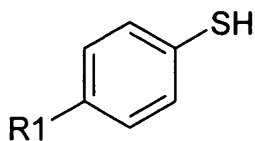
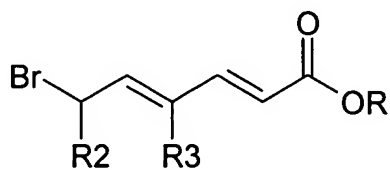


- 6-(4-Chloro-benzenesulfinyl)-hexanoic acid methyl ester (30b)  
 7-(4-Chloro-benzenesulfinyl)-heptanoic acid ethyl ester (30c)  
 6-(4-Dimethylamino-benzenesulfinyl)-hexanoic acid methyl ester (30e)  
 6-(4-((4-Chlorobenzyl)-methylamino)-benzenesulfinyl)-hexanoic acid methyl ester (30f)  
 6-(4'-Chloro-biphenyl-4-ylsulfinyl)-hexanoic acid methyl ester (30i)  
 6-(4-Chloro-benzenesulfinyl)-hexanoic acid hydroxyamide (31a)  
 7-(4-Chloro-benzenesulfinyl)-heptanoic acid hydroxyamide (31c)  
 6-(4-Dimethylamino-benzenesulfinyl)-hexanoic acid hydroxyamide (31e)  
 6-(4-((4-Chlorobenzyl)-methylamino)-benzenesulfinyl)-hexanoic acid hydroxamide (31f)  
 6-(4'-Chloro-biphenyl-4-sulfinyl)-hexanoic acid hydroxyamide (31i)  
 (2E,4E)-5-(5-Dimethylamino-benzo[*b*]thiophen-2-yl)-penta-2,4-dienoic acid ethyl ester (41a)  
 (2E,4E)-5-(5-Dimethylaminobenzo[*b*]thiophen-2-yl)-penta-2,4-dienoic acid hydroxamide (42a)  
 (E)-3-(3-(4-Dimethylamino-phenylsulfanyl)-phenyl)-acrylic acid ethyl ester (51a).  
 (E)-3-(3-(4-Dimethylamino-phenylsulfanyl)-phenyl)-*N*-hydroxy-acrylamide (52a)
20. (currently amended) 4-(4-Dimethylamino-phenylsulfanyl)-2-methyl- pent-2-en-1-ol  
 (~~22b~~) (22b).
21. (original) A process for the preparation of a compound of general formula (I),  
 comprising the addition of a compound of general formula (II) to general formula (III),



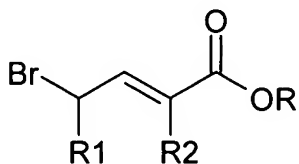
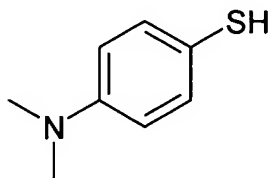
optionally followed by hydrolysis, or oxidation then hydrolysis, where W is a leaving group.

22. (original) A process as claimed in claim 21, in which the compound of general formula (II) is a compound of general formula (5) and the compound of general formula (III) is a compound of general formula (4),

**5****4**

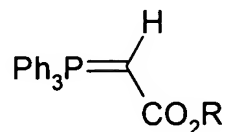
optionally followed by hydrolysis, or oxidation then hydrolysis.

23. (original) A process as claimed in claim 21, in which the compound of general formula (II) is a compound of general formula (20) and the compound of general formula (III) is a compound of general formula (17),

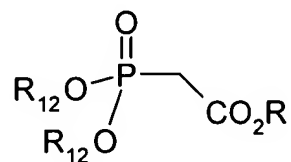
**17****20**

optionally followed by hydrolysis, or oxidation then hydrolysis.

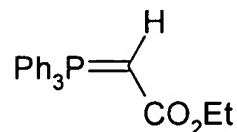
24. (currently amended) A process as claimed in ~~any one of claims claim 21 to 23~~, in which the aldehyde compound corresponding to the product of the addition of a compound of general formula (II) to general formula (III), is reacted with a stabilised phosphorous ylid compound



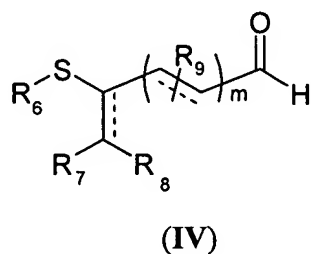
or with a phosphonate compound of general formula:

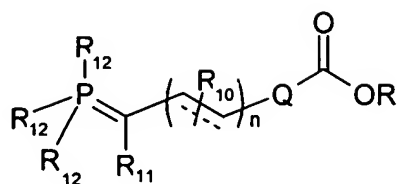


25. (original) A process as claimed in claim 24, in which the stabilised phosphorous ylid compound is (triphenylphosphanylidene)-acetic acid ethyl ester.

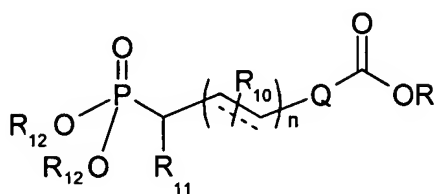


26. (original) A process for the preparation of a compound of general formula (I), comprising the addition of a compound of general formula (IV) to general formula (Va) or (Vb),





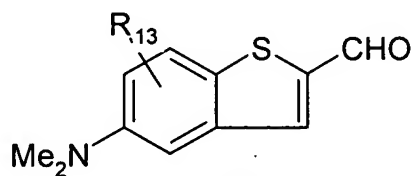
(Va)



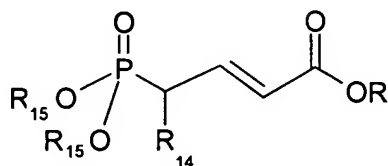
(Vb)

optionally followed by hydrolysis, or oxidation then hydrolysis.

27. (original) A process as claimed in claim 26, in which the compound of general formula (IV) is a compound of general formula (39), and the compound of general formula (Vb) is a compound of general formula (40)



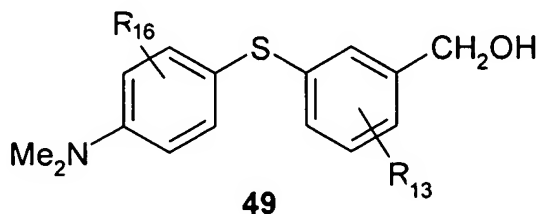
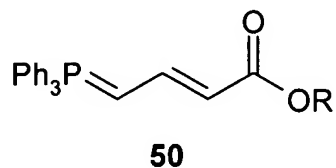
39



40

optionally followed by hydrolysis, or oxidation then hydrolysis.

28. (original) A process as claimed in claim 26, in which the compound of general formula (IV) is a compound of general formula (49) oxidised to the corresponding aldehyde, and the compound of general formula (Va) is a compound of general formula (50)



optionally followed by hydrolysis, or oxidation then hydrolysis.

29. (currently amended) A pharmaceutical composition comprising a compound of general formula (I) as defined in ~~any preceding claim~~ claim 1, and optionally a pharmaceutically acceptable adjuvant and/or diluent.

30. (cancelled) A compound of general formula (I) as defined in any preceding claim for use in medicine.

31. (currently amended) A method of treatment of an individual suffering from a disease condition, the method comprising administering to the individual a therapeutically effective amount of a compound of general formula (I) as defined in ~~any preceding claim~~ claim 1.

32. (currently amended) A method of inhibition of histone deacetylase activity in an individual suffering from a disease condition, the method comprising administering to the individual a therapeutically effective amount of a compound of general formula (I) as defined in ~~any preceding claim~~ claim 1.

33. (currently amended) ~~The use of a compound of general formula (I) as defined in any preceding claim in the manufacture of a medicament for the treatment of~~ method of claim 31 wherein the disease condition is cancer, including breast cancer, colon cancer, colorectal cancer, esophageal cancer, glioma, lung small and non-small cell cancers, leukaemia neuroblastoma, prostate cancer, thoracic cancer, melanoma, ovarian cancer, cervical cancer and renal cancer; cardiac hypertrophy, as well as haematological disorders including hemoglobinopathies, thalassaemia, and sickle cell anemia, auto-immune diseases, such as arthritis, Huntington's disease, and neurological conditions, such as Alzheimer's disease, and genetic-related metabolic disorders, such as cystic fibrosis, peroxisome biogenesis disorders, adrenoleukodystrophy, stimulating hematopoietic cells *ex vivo*, ameliorating protozoal parasitic infection, accelerating and wound healing and protecting hair follicles.

34. (new) The method of claim 33 wherein the cancer is breast cancer, colon cancer, colorectal cancer, esophageal cancer, glioma, lung small and non-small cell cancer, leukaemia neuroblastoma, prostate cancer, thoracic cancer, melanoma, ovarian cancer, cervical cancer, or renal cancer.

35. (new) The method of claim 33 wherein the haematological disorder is hemoglobinopathy, thalassaemia, or sickle cell anemia.

36. (new) The method of claim 33 wherein the auto-immune disease is arthritis.

37. (new) The method of claim 33 wherein the neurological condition is Alzheimer's disease or Huntington's disease.

38. (new) The method of claim 33 wherein the genetic-related metabolic disorder is cystic fibrosis, peroxisome biogenesis disorder, or adrenoleukodystrophy.

39. (new) A method of stimulating a hematopoietic cell *ex vivo* comprising administering to the cell a compound of general formula (I) as defined in claim 1.

40. (new) A method of protecting hair follicles comprising administering to the follicle a compound of general formula (I) as defined in claim 1.